REMARKS

Applicants thank Examiner for the thorough consideration given to the claims in the present application. Claims 1 – 23 are cancelled in the present application. Claims 24 - 26 are pending in the present application. Claims 24 - 26 are independent claims.

Interview Request

Applicants hereby respectfully request an interview with the Examiner in order to discuss and clarify the scope of the claimed invention as compared to the teachings of the presently applied references. The Examiner is requested to contact Applicants' Representative Naphtali Y. Matlis (Reg. No. 61,592) at 703-205-8069 to schedule an interview.

Rejections under 35 U.S.C. § 102 - Suzuki

Claims 24 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,481,553 to Suzuki (hereafter "Suzuki"). Insofar as they pertain to the presently pending claims, these rejections are respectfully traversed.

Claim 24

Claim 24 pertains to a moving picture prediction system that comprises, in pertinent part, "a memory update unit that updates the picture data stored in at least one of the plurality of memories in the reference picture memory area, and controls the capacity of the reference picture memory area"

Suzuki teaches a plurality of memory groups (Fig. 6, 2 and 4), the access of which is controlled by a memory control unit (Fig 6, 3) to select, from the first memory group, a reference picture and match it against a potential matching block from the second memory group (Col. 18, lines 36 – 63). After matching and reconstruction, a reconstructed picture based on a matched matching block is stored in the second memory group (Col. 19, lines 1 – 11).

Suzuki also teaches providing "a block of the reconstructed picture stored in one of the picture memories specified by the memory controller." (Col. 33, lines 63 – 65), but this merely indicates that the memory controller specifies a particular memory. In the Response to Arguments section, the Office Action states that "this disclosure suggests a capacity of one of the memories is specified by the memory control." (Page 3 of Office Action). Applicants find no actual teaching in Suzuki of any such memory capacity control and challenge the Examiner to show evidence of such a teaching in Suzuki.

"For anticipation under 35 U.S.C. 102, the reference must teach every aspect of the claimed invention either explicitly or impliedly. Any feature not directly taught must be inherently present." (MPEP §706.02.V) Even if Suzuki teaches using less than all of the memory allocated to a particular memory group, Suzuki does not address or otherwise directly address the question of actual memory capacity. Applicants respectfully submit that the memory capacity is conceptually separate from the amount actually stored in memory. Merely failing to use the entire amount of allocated memory does not reduce the capacity of that memory. Just as in the case of a DVD having less than 4GB stored thereon, the fact that not all the available memory is used does not diminish the total capacity of the DVD.

Applicants respectfully submit that Suzuki is completely silent regarding any control over the capacity of a reference picture memory area. Applicants respectfully submit that although Suzuki discusses a memory control unit that selects data from a memory group (Col. 18, lines 36 – 63), Suzuki does not teach, suggest, or otherwise discuss any capability of the memory control unit (or any other component) to control "the capacity of the reference picture memory area" as required by claim 24.

Claim 25

Claim 25 pertains to a method for predicting a moving picture that comprises, in pertinent part, "controlling the capacity of the reference picture memory area."

Applicants respectfully submit that for at least the same reasons as stated with respect to claim 24, Suzuki is deficient in its teachings with respect to claim 25. Applicants respectfully submit that the concept of "controlling the capacity of the reference picture memory area" as required by independent claim 25 is wholly missing from the teachings of Suzuki.

Summary

At least in view of the above, Applicants respectfully submit that Suzuki is deficient in its teachings with respect to independent claims 24 and 25. Specifically, Applicants respectfully submit that Suzuki fails to teach or suggest "[controlling] the capacity of the reference picture memory area" as required by independent claims 24 and 25. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

Rejections under 35 U.S.C. § 102 - Boon

Claims 24 and 25 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 5,767,911 to Boon (hereafter "Boon"). Insofar as they pertain to the presently pending claims, these rejections are respectfully traversed.

Claim 24

Boon teaches a system and method for mitigating the accumulation of prediction error over time. (Col. 2, lines 40-45). Boon uses a first frame memory (Fig. 1, 342) for storing template images and a second frame memory (Fig. 1, 340) for storing previously processed images. These images are used for the prediction of input signals.

Applicants respectfully submit that although Boon does disclose a plurality of memories, Boon does not teach or suggest "a memory update unit that updates the picture data stored in at least one of the plurality of memories in the reference picture memory area, and controls the capacity of the reference picture memory area" as required by independent claim 24. Boon specifically teaches two, separate, frame memories are used for predictive image generation

(Col. 5, lines 25 – 43), but Boon makes no teaching or suggestion that these two frame memories are "allocated in a reference picture memory area" or that there is "a memory update unit that ... controls the capacity of the reference picture memory area."

In the Response to Arguments section, the Office Action states that Boon's teaching that "the size of each of the first and second frame memories can be smaller than one frame" (Col. 10, lines 5 – 7) is a teaching of memory capacity control. Applicants respectfully disagree. Merely stating what the size of a memory may be is not at all the same thing as controlling or otherwise adjusting the capacity of that memory. Furthermore, specifically in the case of memories that can be smaller than one frame, Boon teaches that an image may be divided into blocks of any particular shape or size and it is the image block size that permits the use of smaller, fixed-size memories. (Col. 9, line 63 – Col. 10, line 5) The portion of Boon cited as teaching memory capacity control is therefore properly understood as teaching block size control based on frame memory size.

"For anticipation under 35 U.S.C. 102, the reference must teach every aspect of the claimed invention either explicitly or impliedly. Any feature not directly taught must be inherently present." (MPEP §706.02.V) Applicants maintain that the Office Action has failed to show Boon as having any explicit or inherent teaching of memory capacity control. Applicants respectfully submit, as noted above with respect to Suzuki, that memory capacity is conceptually separate and different from memory content. Boon teaches updating and managing memory content, but fails to teach or suggest any device or apparatus that "controls the capacity of a reference picture memory area" as required by claim 24.

Claim 25

Applicants respectfully submit that for at least the same reasons as stated with respect to claim 24, Boon is deficient in its teachings with respect to claim 25. Applicants respectfully submit that the concept of "controlling the capacity of the reference picture memory area" as required by independent claim 25 is wholly missing from the teachings of Boon.

Summary

At least in view of the above, Applicants respectfully submit that Boon is deficient in its teachings with respect to independent claims 24 and 25. Specifically, Applicants respectfully submit that Boon does not teach or suggest "[controlling] the capacity of the reference picture memory area" as required by independent claims 24 and 25. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

Rejections under 35 U.S.C. §102 - Fukuhara

Claim 26 stands rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent 6,381,275 to Fukuhara ("Fukuhara'). Insofar as it pertains to the presently pending claims, this rejection is respectfully traversed.

Claim 26 pertains to a moving picture decoding apparatus that includes, in pertinent part, "a memory update unit that updates the picture data stored in the memory, and controls the capacity of the memory."

Fukuhara teaches an image coding apparatus that uses a frame memory selector that selects image storage locations from among a plurality of frame memories (Abstract). The Office Action suggests that "cutting a memory having a storage capacity for the plurality of frame memories based internal addresses" (Col. 12, lines 18 – 20) is a teaching of memory capacity control. Applicants respectfully disagree.

Fukuhara teaches simultaneously providing a plurality of frame memories from a memory with a particular storage capacity. Applicants note that there is absolutely no teaching or suggestion in Fukuhara that the storage capacity of that memory is somehow controlled or otherwise adjusted.

"For anticipation under 35 U.S.C. 102, the reference must teach every aspect of the claimed invention either explicitly or impliedly. Any feature not directly taught must be inherently present." (MPEP §706.02.V) Applicants respectfully submit that Fukuhara has neither explicit nor implicit teachings of memory capacity control. Just as breaking an image file into smaller, fixed-size blocks does not change the overall size of the image, dividing a memory into a plurality of sub-sections has no effect on the overall capacity of that memory. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

Conclusion

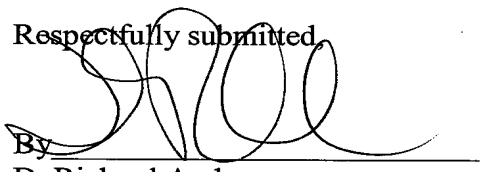
In view of the above remarks, it is believed that claims are allowable.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Naphtali Y. Matlis, Reg. No. 61,592 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

Dated: November 18, 2009

Respectfully submitted,



By
D. Richard Anderson
Registration No.: 40,439
BIRCH, STEWART, KOLASCH & BIRCH, LLP
8110 Gatehouse Road
Suite 100 East
P.O. Box 747
Falls Church, Virginia 22040-0747
(703) 205-8000
Attorney for Applicants

DRA/NYM/hmw